

CLAIMS

1. A method for preparing a controllably biodegradable silica fibre, comprising spinning the fibre from a silica sol, wherein the starting point of the spinning process is controlled by the viscosity of the silica sol.
2. The method according to claim 1 wherein the viscosity of the silica sol at the starting point of the spinning process is below 100 000 mPas.
3. The method according to claim 2 wherein the viscosity of the silica sol at the starting point of the spinning process is from about 1 000 to about 50 000 mPas.
4. The method according to claim 3 wherein the viscosity of the silica sol at the starting point of the spinning process is from about 2 000 to about 15 000 mPas.
5. A method for preparing a controllably biodegradable fibre, comprising spinning the fibre from a spinning sol having a viscosity below 100 000 mPas.
6. The method according to claim 5 wherein the viscosity of the spinning sol is from about 1 000 to about 50 000 mPas.
7. The method according to claim 5 wherein the viscosity of the spinning sol is from about 2 000 to about 15 000 mPas.
8. A controllably biodegradable silica fibre spun from silica sol, the biodegradation of said fibre being controlled by controlling the starting point of the spinning process by the viscosity of the silica sol.
9. The controllably biodegradable fibre according to claim 8, wherein the viscosity of the silica sol at the starting point of the spinning process is below 100 000 mPas.
10. The controllably biodegradable fibre according to claim 9, wherein the viscosity of the silica sol at the starting point of the spinning process is from about 1 000 to about 50 000 mPas.

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11. The controllably biodegradable fibre according to claim 10, wherein the viscosity of the silica sol at the starting point of the spinning process is from about 2 000 to about 15 000 mPas.
- 5 12. A controllably biodegradable silica fibre spun from a silica sol, the biodegradation of the fibre being controlled by controlling the viscosity of the spinning sol.
- 10 13. The controllably biodegradable fibre according to claim 12, wherein the viscosity of the spinning sol is below 100 000 mPas.
14. The controllably biodegradable fibre according to claim 13, wherein the viscosity of the spinning sol is from about 1 000 to about 50 000 mPas.
- 15 15. The controllably biodegradable fibre according to claim 14, wherein the viscosity of the spinning sol is from about 2 000 to about 15 000 mPas.
- 20 16. A method for controlling the biodegradation of a silica fibre spun from a silica sol, wherein the method comprises controlling the viscosity of the spinning sol.
- 25 17. The method according to claim 16 wherein the viscosity of the spinning sol is below 100 000 Pas.
- 30 18. The method according to claim 17 wherein the viscosity of the spinning sol is from about 1 000 to about 50 000 mPas.
- 35 19. The method according to claim 18 wherein the viscosity of the spinning sol is from about 2 000 to about 15 000 mPas.
20. A method for controlling the biodegradation of a silica fibre spun from a silica sol, wherein the method comprises controlling the viscosity of the silica sol at the starting point of the spinning process.
- 11 21. The method according to claim 20 wherein the viscosity of the silica sol at the starting point of the spinning process is below 100.000 mPas.

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~~22~~. The method according to claim ¹¹~~21~~ wherein the viscosity of the silica sol at the starting point of the spinning process is from about 1 000 to about 50 000 mPas.

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~~23~~. The method according to claim ¹²~~22~~ wherein the viscosity of the silica sol at the starting point of the spinning process is from about 2 000 to about 15 000 mPas.

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~~24~~. A delivery device comprising the controllably biodegradable fibre according to any one of claims 8-15, wherein the fibre contains a biologically active agent.

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¹⁰ ~~25~~. The delivery device according to claim ¹⁵~~24~~, wherein said biologically active agent is a medicine, a protein, a hormone, a living or dead cell, a bacteria, a virus or a part thereof.

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¹⁵ ~~26~~. The delivery device according to claim ¹⁶~~25~~, wherein said biologically active agent is a medicine.

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~~27~~. A pharmaceutical preparation comprising a delivery device according to any one of claims 24-26.

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²⁰ ~~28~~. A method for administering a biologically active agent into a human or animal, wherein said method comprises implanting, injecting, or mucosally attaching a delivery device, wherein said delivery device comprises a controllably biodegradable fibre according to any of claims 8-15 and wherein the fibre comprises a biologically active agent.

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²⁵ ~~29~~. The method according to claim ¹⁹~~28~~, wherein the biologically active agent is administered into a mammal.